IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

In re application of   Docket No: Q68075

Laurent ROULLET, et al.

Appln. No.: 10/043,326   Group Art Unit: 2472

Confirmation No.: 6676   Examiner: Afsar M. Quershi

Filed: January 14, 2002

For: RELAY INCLUDING A MASS MEMORY FOR TEMPORARILY STORING DIFFERED-TIME INFORMATION STREAMS

APPEAL BRIEF UNDER 37 C.F.R. § 41.37

MAIL STOP APPEAL BRIEF - PATENTS
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

       In accordance with the provisions of 37 C.F.R. § 41.37, Appellant submits the following:

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I.   REAL PARTY IN INTEREST

Based on the information supplied by Appellants, and to Appellants' legal representatives' knowledge, the real party in interest is the assignee, Alcatel.

II.　　RELATED APPEALS AND INTERFERENCES

To the best of their knowledge, there are no other related appeals or interferences known to Appellants, Appellants' legal representative or the assignee that will directly affect, be affected by, or have a bearing on the Board's decision in the instant appeal.

III.   STATUS OF CLAIMS

Claims 1-9 are all the claims pending in the present application. Claims 1-9 have been finally rejected and are the subject of this appeal. The pending claims are set forth in the Appendix.

IV.   STATUS OF AMENDMENTS

No claim amendments were submitted subsequent to the Final Office Action dated November 4, 2009.

V.   SUMMARY OF THE CLAIMED SUBJECT MATTER

An exemplary embodiment is directed to a relay for use in telecommunications equipment (*e.g., telecommunications satellite S, Fig. 2*). The relay includes: a receiver adapted to receive an information stream consisting of information cells (*e.g., element R, Fig. 2*), some of which can be empty, a mixer adapted to detect the empty information cells and replace them with waiting cells (*e.g., element M, Fig. 2*), and a transmitter adapted to transmit the information cells to a receiver outside said telecommunications equipment (*e.g., element E, Fig. 2*), wherein said relay further comprises a stream analyzer for determining if an information stream received by said receiver is a real-time information stream or a differed-time information stream cells in a mass memory and in that said mixer is adapted to choose said waiting cells from among the cells stored in said mass memory. *See, e.g., claim 1 and page 4, lines 1-16.*

Another exemplary embodiment is directed to a method including: receiving an information stream made up of information cells, some of which can be empty (*e.g., page 5, lines 13-15*); detecting empty information cells (*e.g., page 6, lines 5-10*); replacing said empty information cells with waiting cells, and transmitting information cells. The method further includes: determining if an information stream is a real-time information stream or a differed-time information stream, and storing differed-time information stream cells, and in that said waiting cells are chosen form among the stored information cells (*page 4, lines 27-29*). *See, e.g. claim 4.*

VI.　　GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

1.　　　Claims 1, 4, and 7 stand rejected under 35 U.S.C. § 102(e) as allegedly being anticipated by Feldman (U.S. Patent No. 6,393,000).

2.　　　Claims 2, 3, 5, 6, 8, and 9 stand rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Feldman in view of Thiesfeld (U.S. Patent No. 6,529,971).

VII.   ARGUMENT

A.   Feldman does not anticipate the claimed invention, as recited in claims 1, 4, and 7. Specifically, Feldman does not disclose or suggest at least, "wherein said relay further comprises a stream analyzer for determining if an information stream received by said receiver is a real-time information stream or a differed-time information stream cells in a mass memory and in that said mixer is adapted to choose said waiting cells from among the cells stored in said mass memory."

A brief description of Feldman is as follows.

Feldman is directed to a network station that receives a principal signal and data. When the principal signal is present or contains information it is transmitted to a receiving station through a communications channel. When the principal signal is absent or does not have significant information content, the network station transmits the data through the same communications channel in a format such that the data is received and output by a further receiving station. *See Abstract of Feldman.*

With respect to independent claim 1, Appellants submit that the applied references, either alone or in combination, do not disclose or suggest at least, "a receiver (R) adapted to receive an information stream consisting of <u>information cells</u>, some of which can be <u>empty</u>," and "a mixer (M) adapted to detect <u>the empty information cells</u> and replace them with waiting cells," as recited in claim 1 (<u>emphasis</u> added). The Examiner alleges that the silence codes discussed in Feldman allegedly satisfy the claimed empty cells recited in the above-quoted features of claim 1. However, the silence codes do not correspond to empty cells. A silence code can be issued to reproduce silence or low level noise during a voice communication, when the principle signal is a voice signal. However, the silence code does not denote an empty cell.

In response, in the Office Action dated February 5, 2008, the Examiner alleges:

On page 6, Applicant argued that "empty information cells", as claimed, are different from "silence code" cited by the Examiner. A silence code, as argued by the Applicant, "can be issued to reproduce silence or low level noise during a voice communication, when the principle signal is a voice signal". However, there is no specific description of "empty cell" either in the Specification or in the above dated Argument/REMARKS. Upon further search, Examiner found a prior definition of empty cell whereby an "empty-cell or blank cell" contains specified sequence bits representing that the cell is a blank cell and can be inserted in the transmitted stream of ATM-cells, the empty cell or silent cell can be dropped or duplicated according to the detected state of buffer (Engdahl, US 6,876,666).

In the absence of a specific and distinct definition of "empty cell", Examiner broadly interpreted the same as equivalent to a 'silence code'. (Engdahl, US 6,876,666, is used in Response to Argument only and not made part of rejection).

In response, Appellants submit that in the absence of a specific definition for "empty cell" in the originally filed specification of the present application, the proper strategy should be for the Examiner to look at a dictionary definition of the word "empty", and not look to a separate reference that could have a totally different definition of the term 'empty cells' than what is intended in the present application. As the Examiner is no doubt aware, an inventor is allowed to be his or her own lexicographer, therefore looking at a totally different reference for a definition of 'empty cells' is not the proper strategy to broadly construe meanings of unknown terms. The proper strategy would be to look to a dictionary definition of the term at issue. In this case, a generally accepted dictionary, Merriam Webster online, indicates that the word empty can mean containing nothing. Therefore, the term empty cells, as used in claim 1, for example, should broadly be considered to be a cell that contains nothing (e.g., no data).

In the Office Action dated November 4, 2009, the Examiner alleges, in part:

Examiner notes that an inventor is entitled to be his or her own lexicographer. However, an inventor must define specific terms used to describe invention with reasonable clarity, deliberateness, and precision and set out his/her uncommon definition in some manner within the patent disclosure so as to give one of ordinary skill in the art notice of the change in meaning (*Intellicall, Inc. v. Phonometrics, Inc.*, 925 F.2d 1384, 1387-88, 21 USPQ2d 1383, 1386 (Fed. Cir. 1992). Where an explicit definition is provided in the Disclosure by the Applicant for a term, that definition will control interpretation of the term as it is used in the claim. Meaning of words used in a claim is not construed in a "lexicographic vacuum", but in the context of the Specification and drawings. Any special meaning assigned to a term "must be sufficiently clear in the Specification" that any departure from common usage would be understood by a person of experience in the field of the invention.

In response to the Examiner's argument above, Appellants respectfully submit that there was no special meaning assigned to the term "empty". In fact, as further discussed below, it is the Examiner that insists on assigning a 'special' meaning to the word "empty". In the context of the specification, one of ordinary skill in the art would clearly understand that empty information cells do not correspond to silence codes, as the Examiner appears to believe. Absent the assignment of a special meaning, the term 'empty' should give given its ordinary and common meaning.

Based on this understanding of a meaning of "empty cells", Appellants maintain that Feldman does not disclose or suggest at least, "a receiver (R) adapted to receive an information stream consisting of <u>information cells</u>, some of which can be <u>empty</u>," and "a mixer (M) adapted to detect <u>the empty information cells</u> and replace them with waiting cells," as recited in claim 1.

Further, the Examiner alleges in, in part, in the Office Action dated November 4, 2009:

In the Specification, an empty information cell is generally disclosed as a "filler cell". A "filler cell", in the pertinent art, is considered to be same as a 'blank cell' or a 'silent code' or an 'empty cell' containing specified sequence bits representing that

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> the cell is a blank cell or an empty cell and can be inserted in a transmitted stream (padding) for various reasons, for example, synchronization.
>
> Further, the term "empty information cells" in claim 1 is used by the claim to mean "empty information cell that contains nothing, e.g., no data" (see Arguments, 8/3/2009, page 5, lines 10-11) while the accepted meaning is "filler cell" (as defined above). The term is indefinite because the Specification does not clearly redefine the term. A rejection under 35 U.S.C. § 112, 2nd paragraph, is withheld pending further clarification of the term within the Specification.

In response, Appellants submit that the Examiner has, in fact, assigned a specific meaning to the term 'empty information cell' that is not set forth in the specification, to support the Examiner's position. If this attempt of the Examiner does not reflect an impermissible reading of a term's meaning into the specification, Appellants do not know what does. That is, the Examiner alleges that one should disregard the common and ordinary meaning of the word 'empty' and replace that meaning with the definition of a filler cell. If the Examiner is permitted to make this type of substitution, then the Examiner essentially has been given the power to interpret the specification and claim language not only reasonably broadly, but also as he/she sees fit – even if this interpretation is based on impermissible hindsight reasoning and does not comport with the common meaning of a word. Clearly, 'filler cell' should not be allowed to define the meaning of "empty information cells". Using the Examiner's own words, he/she has applied a 'special' meaning to 'empty information cells' that is neither supported by the specification nor consistent with any provisions of the specification.

Further with respect to claim 1, this claim recites that a relay comprises the claimed receiver, mixer, transmitter, and stream analyzer. The Examiner alleges that the network station 4 of Feldman corresponds to the claimed relay. However, the Examiner is being inconsistent in

alleging that the comparator 25 allegedly corresponds to the claimed stream analyzer, as the network station 4 does not comprise the comparator 25; on the other hand, the claimed relay comprises, among other things, the stream analyzer.

Yet further, Appellants submit that the applied references do not disclose or suggest at least, "wherein said relay further comprises a stream analyzer for determining if an information stream received by said receiver is a real-time information stream or a differed-time information stream cells in a mass memory and in that said mixer is adapted to choose said waiting cells from among the cells stored in said mass memory," as recited in claim 1. The Examiner does not even address the feature of determining whether an information stream received by a receiver is a real time information stream or a differed-time information stream.

At least based on the foregoing, Appellants submit that claim 1 is patentably distinguishable over Feldman.

Appellants submit that independent claim 4 is patentable at least based on reasons similar to those set forth above with respect to claim 1. Dependent claim 7 is patentable at least by virtue of its dependency from independent claim 1.

Further, with respect to dependent claim 7, the Examiner simply alleges that the telecommunication equipment disclosed by Feldman is in a satellite environment. Further, the Examiner cites Fig. 1, and col. 5, lines 7-17 of Feldman. According to Appellants' understanding, the Examiner correlates the network station 4 of Feldman to the claimed relay which is used in telecommunication equipment comprising a satellite, according to claim 7. According to Appellants' review of Feldman, the network station 4 does not appear to be used in telecommunication equipment comprising a satellite. Simply because Feldman relates to a

satellite environment does not necessarily mean that the specific features of claim 7 are satisfied.

Accordingly, Appellants submit that Feldman does not anticipate claim 7.

      B.   Neither Feldman nor Thiesfeld, alone or in combination, renders claims 2, 3, 5, 6, 8, and 9 unpatentable.

Appellants submit that dependent claims 2, 3, 5, 6, 8, and 9 are patentable at least by virtue of their respective dependencies from independent claims 1 and 4. Thiesfeld does not make up for the deficiencies of Feldman.

Yet further, with respect to dependent claims 8 and 9, Appellants submit that neither of the applied references, alone or in combination, discloses or suggests at least, "said empty information cells are related to a difference between a needed bit rate and a reserved bandwidth," as recited in claims 8 and 9. To allegedly satisfy the features of claims 8 and 9, the Examiner simply talks about the general teachings of Feldman as being concerned with fair bandwidth allocation and transmission scheduling, and further agues that voice communication silence codes are included. Yet further, the Examiner simply summarily alleges that one of ordinary skill in the art would readily realize that silence codes (alleged empty information cells) are related to a difference between needed bit rate and reserve bandwidth. There is nary a suggestion or teaching of such feature in any of the applied references. Accordingly, Appellants maintain that claims 8 and 9 are patentably distinguishable over the applied references, alone or in combination.

Conclusion

In summary, at least based on the foregoing, Appellants submit that the Examiner has not demonstrated that each and every feature of the claimed invention, as set forth in claims 1-9, is

taught and/or suggested by the applied references, alone or in combination. Therefore,

Appellants submit that claims 1-9 are patentably distinguishable over the applied art.

The USPTO is directed and authorized to charge the statutory fee (37 C.F.R. §41.37(a)

and 1.17(c)) and all required fees, except for the Issue Fee and the Publication Fee, to Deposit

Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,

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WASHINGTON OFFICE
23373
CUSTOMER NUMBER

Date: November 2, 2010

CLAIMS APPENDIX

CLAIMS 1-9 ON APPEAL:

1.   A relay for use in telecommunications equipment, said relay comprising:

a receiver adapted to receive an information stream consisting of information cells, some of which can be empty,

a mixer adapted to detect the empty information cells and replace them with waiting cells, and

a transmitter adapted to transmit the information cells to a receiver outside said telecommunications equipment,

wherein said relay further comprises a stream analyzer for determining if an information stream received by said receiver is a real-time information stream or a differed-time information stream cells in a mass memory and in that said mixer is adapted to choose said waiting cells from among the cells stored in said mass memory.

2.   A relay according to claim 1, further comprising a deleter for deleting an information cell stored in said mass memory when it has been sent by said transmitter to said receiver.

3.   A relay according to claim 1, wherein said mixer is adapted to choose said waiting cells as a function of time scheduling rules.

4.   A method comprising the steps of:

receiving an information stream made up of information cells, some of which can be empty,

detecting empty information cells,

replacing said empty information cells with waiting cells, and

transmitting information cells,

which method is characterized in that it further comprises the steps of:

determining if an information stream is a real-time information stream or a differed-time information stream, and

storing differed-time information stream cells, and in that said waiting cells are chosen form among the stored information cells.

5.   A method according to claim 4, further comprising a step of deleting a stored information cell when it has been sent.

6.   A method according to claim 4, wherein in said waiting cells are chosen as function of time scheduling rules.

7.   The relay according to claim 1, wherein said telecommunications equipment comprises a satellite.

8.   The relay according to claim 1, wherein said empty information cells are related to a difference between a needed bit rate and a reserved bandwidth.

9.   The method according to claim 4, wherein said empty information cells are related to a difference between a needed bit rate and a reserved bandwidth.

EVIDENCE APPENDIX:

NONE.

RELATED PROCEEDINGS APPENDIX

NONE.

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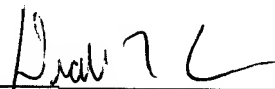Commissioner for Patents
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Sir:

        Submitted herewith please find an Appeal Brief. The USPTO is directed and authorized to charge the statutory fee of $540.00 and all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

                                        Respectfully submitted,

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